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## Claims

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**What is claimed:**

- 1. A thermoplastic shell splint or brace for the carpal tunnel, comprising:**
  - a) a support and protective shield/dome overlying the carpal tunnel of the human wrist**
  - b) first securing means for reasonably securing the support means to the hand.**
  - c) a thin shell formed of a rigid material fitted to the human hand and forearm to rest upon the thenar, hypothenar, lateral distal wrist and proximal forearm**
  - d) a dome or raised shield protecting the carpal tunnel arising from the portions of the brace in contact with the skin of statement c above**
- 2. The splint of claim 1, wherein the support means is rectangular and spanning the proximal palm, volar surface of the wrist and the proximal forearm**
- 3. The splint of claim 2, wherein the support means include two straps secured to the lateral margins of the brace and joined to the dorsal area of the wrist by a buckle/velcro closure to secure the brace**

4. The splint of claim 2, having longitudinal and transverse axes for the treatment of carpal tunnel syndrome, comprising: a palmar section having a distal end contoured to fit the rounded surfaces of the thenar and hypothenar areas of the palm and to end forward approximately mid way of these anatomic landmarks; a mid section extending from the proximal end of said palmar section forming a raised dome over the area of the mid inner wrist or carpal tunnel region of the wearer which slopes downward at its lateral edges to contact the outer portion of the wrist; a proximal section extending backwards from the said mid section to contour the forearm
5. The carpal tunnel device according to claim 1 wherein said dome is perforated by small holes for ventilation of the wearer's skin.
6. The carpal tunnel device according to claim 1 wherein the mid section of the brace is a raised dome above the carpal area elevated above and away from the width and breath of the of carpal tunnel area approximate five millimeters at the domes forward aspect and tapering backwards gradually to conform with and to lie against the forearm at the rearward or proximal border of the carpal tunnel area at the forearm.
7. The carpal tunnel device according to claim 6 wherein said dome curves downwards and outwards to contact: the proximal base of the hand just forward of the mid wrist crease, laterally the outer borders of the volar wrist just outside the lateral borders of the anatomic carpal tunnel, and rearward the forearm just proximal to the anatomic carpal tunnel area.
8. The carpal tunnel device according to claim 3 wherein said attachment means is a single strap for wrapping about the forearm having a first and second end secured to said main section and ascending from either side of the brace to fasten by the passing of the second strap through a buckle

ending of the first strap and then pulling of the second strap to fasten upon itself by means of Velcro closure.

9. The carpal tunnel device according to claim 1 wherein the shell or base is composed of a thin low temperature molded thermoplastic having a gage of approximately 1/16 inch depending on thickness desired.
10. The carpal tunnel device according to claim 2 wherein the shell is contoured to follow the natural conformation of the palm, wrist and hand, except at the domed portion of the mid section which is raised above the tunnel; and is generally linear along the longitudinal and transverse axes and is curvilinear in a direction normal to the axes to support the hand in a neutral position.
11. The carpal tunnel device according to claim 7 wherein said carpal tunnel device is self-supporting in shape but ultra light in weight at 1.5 to 2 ounces and rigid in character so as to maintain its shape and support characteristics under load bearing.
12. The carpal tunnel device according to claim 1 that is contoured to a minimal area of the palm, wrist and forearm to allow for a greater range of motion while protecting the carpal region.